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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,350	08/13/2001	Arnaud Doat	PF 93 PCT US	8605
25666	7590	05/11/2004	EXAMINER	
THE FIRM OF HUESCHEN AND SAGE 500 COLUMBIA PLAZA 350 EAST MICHIGAN AVENUE KALAMAZOO, MI 49007			CHIN, RANDALL E	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 05/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

<b>Office Action Summary</b>	<b>Application No.</b> 09/913,350	<b>Applicant(s)</b> DOAT, ARNAUD	
	<b>Examiner</b> Randall Chin	<b>Art Unit</b> 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20-35 and 37-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-35 and 37-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 20-26, 28 and 30-40 are rejected under 35 U.S.C. 102(a) as being anticipated by Cano '190.

Cano '190 teaches various embodiments of a toothbrush (see different embodiments of Figs. 5, 8, 9, 10 or 12) of elongate form, comprising bristles wherein on a flat horizontal support 50, there is at least one position of stable equilibrium in which the longitudinal direction of the brush is essentially parallel to the support and the bristles lie at a distance from the support and extend towards the support **(if a user orients the bristles in this downwards direction)**, wherein the position(s) of stable equilibrium would be the only position(s) of stable equilibrium of the toothbrush on the support.

As for claim 21, the Figs. 8 or 12 embodiments show an arrangement where there is only one position of stable equilibrium.

As for claim 22, there is a distal portion and a proximal portion 46, 100, 108, 112, 142 extending between the bristles and distal portion in the longitudinal direction, and an intermediate portion therebetween such that the distal and proximal portions

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constitute the portions of contact of the toothbrush with the flat support and the intermediate portion lying at a distance from the support.

As for claims 23 and 24, there would be only a single point of contact of the proximal portion with the support in the position of stable equilibrium.

With respect to claim 25, the proximal portion is of a generally flat shape.

As for claim 26, the proximal portion is of generally flat shape and in a plane essentially perpendicular to the longitudinal direction of the toothbrush (Fig. 8).

As for claim 28, Fig. 10 shows an off-center proximal portion with respect to the central longitudinal axis of the toothbrush.

As for claim 30, the proximal portion projects from the handle all the way around the longitudinal axis of the toothbrush.

As for claims 31 and 32, in a broad sense, the proximal portion forms with the handle a "re-entrant" edge on a side of the proximal portion situated toward the bristles or distal portion. Any portion can be considered an "edge."

As for claim 33, the proximal portion has an elastomeric outer face since it is made from rubber or an elastomeric plastic (see col.3, line 65 to col.4, lines 1-19).

With respect to claim 34, the Fig.10 embodiment demonstrates a distal portion shape where there would be two points of contact with the support.

As for claim 35, the bottom surface of the distal portion is flat and is generally parallel to the longitudinal direction of the toothbrush.

Cano '190 teaches with respect to claim 37 in the Fig.10 embodiment a toothbrush of elongate form, comprising bristles wherein when the toothbrush is placed

in any initial position on a flat horizontal support, the toothbrush will spontaneously adopt a stable position in which the longitudinal direction of the brush is essentially parallel to the support and the bristles lie at a distance from the support and extend towards the support **(if a user orients the bristles in this downwards direction)**.

As for claim 38, the stable position or orientation will always be the same, whatever the initial position will be in the Fig.10 embodiment.

Cano '190 also meets newly added claims 39 and 40 for similar reasons as mentioned above.

3. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 20, 22-25, 27, 31, 32 and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Switzerland 180027.

Switzerland 180027 teaches a toothbrush of elongate form, comprising bristles wherein on a flat horizontal support there is at least one position of stable equilibrium (Fig. 2) in which the longitudinal direction of the brush is essentially parallel to the support and the bristles lie at a distance from the support and extend towards the support wherein the position(s) of stable equilibrium would be the only position(s) of stable equilibrium of the toothbrush on the support.

Applicant should note that although Switzerland 180027 may disclose **several positions of equilibrium**, the present language of claim 20 fails to define over what Switzerland 180027 teaches. Here, the **several positions of equilibrium** still includes **one** position of "stable equilibrium" which would be the shown in the Fig. 2 view of

Switzerland 180027 (where the bristles lie at a distance from the support and extend toward the support). Although Switzerland 180027 may teaches several positions of "equilibrium," it still would teach one position (moreover, the only position of "**stable** equilibrium" as defined by claim 20) of "**stable** equilibrium" as defined by claim 20. Claim 20 never precludes the presence of other types or positions of possible "equilibrium" of the toothbrush which may exist. Accordingly, newly added claims 39 and 40 are similarly met by Switzerland 180027.

As for claim 22, there is a distal portion a5 and a proximal portion a2 (Fig. 2) extending between the bristles and distal portion in the longitudinal direction, and an intermediate portion therebetween such that the distal and proximal portions constitute the portions of contact of the toothbrush with the flat support and the intermediate portion lying at a distance for the support.

As for claims 23 and 24, there would be only a single point of contact of the proximal portion with the support in the position of stable equilibrium.

With respect to claim 25, the proximal portion a2 is of a "generally" flat shape.

As for claim 27, the proximal portion is of "generally" flat shape in a plane that is essentially inclined with respect to the longitudinal direction of the toothbrush.

As for claims 31 and 32, in a broad sense, the proximal portion forms with the handle a "re-entrant" edge on a side of the proximal portion situated toward the bristles or distal portion. Any portion can be considered an "edge."

With respect to claim 34, there is a distal portion shape where there would be two points of contact with the support.

As for claim 35, the bottom surface of the distal portion is flat and is generally parallel to the longitudinal direction of the toothbrush.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 20-24, 29-32, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lodato '796 in view of Switzerland 180027.

The patent to Lodato '796 discloses in Fig. 1 and 2A-2C a toothbrush 10 of elongate form, comprising bristles 16 wherein on a flat horizontal support 20, there is at least one position of stable equilibrium in which the longitudinal direction of the brush is essentially parallel to the support and the bristles lie at a distance from the support wherein the position(s) of stable equilibrium would be the only position(s) of stable equilibrium of the toothbrush on the support. Lodato '796 teaches all of the recited subject matter with the exception of the bristles extending towards the support.

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Switzerland 180027 discloses a toothbrush arrangement wherein bristles could extend either towards or away from a horizontal support (Figs. 1 and 2) when not in use. It would have been obvious to one of ordinary skill in the art to have modified Lodato's bristle arrangement such that the bristles extend towards the support as suggested by Switzerland 180027 for the purposes of preventing the bristles from coming into contact with other objects or just to simply permit improved drainage of water by gravity from the bristles after usage.

As for claim 21, there is only one position of stable equilibrium.

As for claim 22, there is a distal portion B and a proximal portion A extending between the bristles and distal portion in the longitudinal direction, and an intermediate portion therebetween such that the distal and proximal portions constitute the portions of contact of the toothbrush with the flat support and the intermediate portion lying at a distance from the support.

As for claims 23 and 24, there would be only a single point of contact of the proximal portion with the support in the position of stable equilibrium.

As for claim 29, the proximal portion A projects from a side of the handle opposite another side of the handle supporting the bristles in the modified Lodato device.

As for claim 30, the proximal portion projects from the handle all the way around the longitudinal axis of the toothbrush.



As for claims 31 and 32, in a broad sense, the proximal portion forms with the handle a "re-entrant" edge on a side of the proximal portion situated toward the bristles or distal portion. Any portion can be considered an "edge."

The modified Lodato device (i.e., in combination with Switzerland 180027) teaches a toothbrush of elongate form, comprising bristles wherein when the toothbrush is placed in any initial position on a flat horizontal support, the toothbrush will spontaneously adopt a stable position in which the longitudinal direction of the brush is essentially parallel to the support and the bristles lie at a distance from the support and extend towards the support.

As for claim 38, the stable position or orientation will always be the same, whatever the initial position will be.

The modified Lodato device (i.e., in combination with Switzerland 180027) also meets newly added claims 39 and 40 for similar reasons as mentioned above.

### ***Conclusion***

8. Applicant's arguments filed April 24, 2004 have been fully considered but they are not persuasive.

Applicant's arguments have been considered, however, the Examiner has maintained art rejections originally presented.

With respect to the Cano '190 reference, Applicant's arguments that Cano '190 teaches an implement handle grip which may include optional features which allow the expanded implement handle to have the improved function and that Cano '190 does not

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disclose a toothbrush having the features of the instantly claimed invention is unpersuasive. It should be pointed out that one independent claim 20 uses languages reciting that the toothbrush "exhibits", on a flat horizontal support the position(s) of stable equilibrium as opposed to the toothbrush "having" or "comprising" certain features. Moreover, independent claim 37 merely uses language such as "when the toothbrush is placed in any position on a flat horizontal support, the toothbrush spontaneously adopts a stable position...". Thus, Applicant's argument is not persuasive given the type of language actually recited by claims 20 and 37, for example. Notwithstanding the present language of claims 20-35 and 37-40 is not deemed to define over Cano's teaching. The fact that Cano may teach an optional feature or grip that fits onto a toothbrush still results in a "toothbrush" having the claimed features (i.e., elongate form and bristles) in the final product. The bristle orientation, as stated above, is deemed to be within the level of ordinary skill and merely depends on the toothbrush orientation in the grip.

As for Switzerland 180027, Applicant should note that although Switzerland 180027 may disclose several positions of equilibrium, the present language of claim 20, for example, fails to define over what Switzerland 180027 teaches. Here, the several positions of equilibrium still includes one position of "**stable** equilibrium" which would be the shown in the Fig. 2 view of Switzerland 180027 (where the bristles lie at a distance from the support and extend toward the support). Although Switzerland 180027 may teaches several positions of "equilibrium," it still would teach one position (moreover, the only position of "**stable** equilibrium" as defined by claim 20) of "**stable** equilibrium"

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as defined by claim 20. The claims never precludes the presence of other types or positions of possible "equilibrium" of the toothbrush which may exist.

As for Lodato '796, as stated above, it would have been obvious to one of ordinary skill in the art to have modified Lodato's bristle arrangement such that the bristles extend towards the support as suggested by Switzerland 180027 for the purposes of preventing the bristles from coming into contact with other objects or just to simply permit improved drainage of water by gravity from the bristles after usage. It will be pointed out that Lodato '796, the primary reference applied, clearly teaches a toothbrush having or exhibiting only one position of equilibrium. To have simply modified Lodato such that the bristles actually extend towards the support as opposed to away from it is within the level of one skilled in the art given the teaching to Switzerland 180027. In response to applicant's argument that there is no suggestion to combine the Lodato '796 and Switzerland 180027, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, orienting the bristles towards the support would be for the purposes of preventing the bristles from coming into contact with other objects or just to simply permit improved drainage of water by gravity from the bristles after usage.

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9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communication from the Examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The Examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Robert Warden, can be reached at (571) 272-1281. The number for Technology Center 1700 is (571) 272-1700.

The central fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).



R. Chin



Randall Chin  
Primary Examiner  
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